

Friday, April 21, 2017 11:53:09 AM

Page 1

Approvals: Process Plan: DAS 21 Date: APR 21 2017 Tooling: _____ Date: _____ Run Start *NR1*

QC: 9-89 Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr	
D3801	B	ADD 2 / 2017

110	Receive & Inspect for Damage & Mat'l Certs	0.00	10x SPI 7-4-27
110			
Packaging	Memo	0.20	
Packaging	Ensure material certification is attached		

120	QC6- Inspect dimensions to drawing	0.00			
120					
QC	Memo	0.00			
Quality Control	Ensure Material certification comply to Dwg D3801				




APR 27 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation			Disposition		
			Completed By		
			Lead hand / Supervisor Approval Verification		
			QC / QA Coordinator Approval		
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

Work Order ID 160148

Friday, April 21, 2017 11:53:09 AM

160148

Page 2

Item ID: D3801-1 Accept *N900040100* Setup Start *NS1*
Revision ID: Stop *NS2*
Item Name: Hand Retractable Spring Plunger
Start Date: 4/24/2017 Start Qty: 10.00 *10* Cust Item ID:
Required Date: 5/8/2017 Req'd Qty: 10.00 *10* Customer:
Reference: SCHEDULED

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Identify as per dwg & Stock Location: <u>Stosa</u>	0.00							
130									
Packaging	Memo	0.10							
Packaging									
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	1.00							
Quality Control									

70 DAS
6
9-89

APR 28 2017

17/5/1/9

DAS
21
9-89

MAY 01 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY			
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐		
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐		
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐		
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐		
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐		
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐		
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐		
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐		
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐		
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐		
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____					
Misidentified ☐	Past Due ☐						

Picklist Print

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Page 1

Work Order ID: 160148

160148

Parent Item: D3801-1

D3801-1

Parent Item Name: Hand Retractable Spring Plunger

Start Date: 4/24/2017

Required Date: 5/8/2017

Start Qty: 10.00

Required Qty: 10.00

Comments: IPP Rev:A 08-07-22 new issue DD verified by:EC
12.03.06 AS PER DWG REV.B DD VERF:EC

IPP REV:B

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
KBP-504		Purchased	No			110	Each	0.0000	1	10			
KBP-504									**				
Hand Retractable Spring Plunger													

10x SP/74-27

DQA: _____ Date: _____



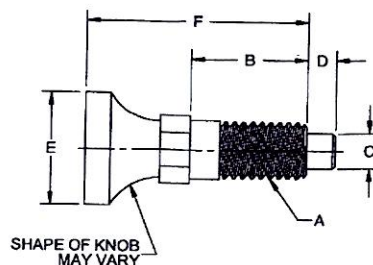
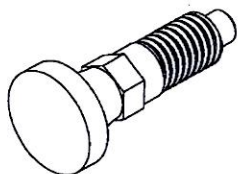
WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐		Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐					
OTHER : _____									

SPECIFICATION CONTROL DRAWING



SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 160148ms

not-21

D3801-X HAND RETRACTABLE SPRING PLUNGER

DART P/N	SUPPLIER	SUPPLIER P/N	'A' THREAD SIZE	'B' THREAD LENGTH	'C' NOSE DIAMETER	'D' NOSE LENGTH	'E' HEAD DIAMETER	'F' LENGTH	'G' WIDTH ACROSS FLATS	MATERIAL (BODY/ NOSE)	MATERIAL (KNOB)	TYPE	END FORCE (lbs)	WEIGHT (lbs)
D3801-1	REID SUPPLY COMPANY	KBP-504	3/8-24 UNF	0.67	0.197	0.20	0.83	1.71	0.50	303 SS	BLACK DELRIN	NON-LOCKING	2.7	0.01
D3801-3	REID SUPPLY COMPANY	PRT-22 OR PRT-22N	1/2-13 UNC	1.00	0.313	0.25	1.00	1.90	0.52	303 SS	WHITE DELRIN	NON-LOCKING	1.75	0.02

△B

△B

- NOTES:
1) MATERIAL: SEE TABLE
2) FINISH: N/A
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: N/A

RELEASED
2012-03-02

B	SUPPLIER P/N CHANGED: BODY/NOSE MAT'L WAS STEEL NOW STAINLESS STEEL.		MB	12.02.24
A	NEW ISSUE		MB	08.06.19
REV.	DESCRIPTION		BY	DATE
DESIGN	DRAWN		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED	MFG. APPR.		DRAWING NO. D3801	
APPROVED	DE APPR.		REV. B	
DATE	12.02.24		SHEET 1 OF 1	
TITLE			SCALE	
HAND RETRACTABLE SPRING PLUNGER			NTS	
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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
				Completed By _____					
				Lead hand / Supervisor Approval Verification _____					
				QC / QA Coordinator Approval _____					

Root Cause				FAULT CATEGORY			
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐		
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐		
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐		
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Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐		
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Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐		
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____					
Misidentified ☐	Past Due ☐						



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO36044**

Purchase Order Date 4/24/2017

PO Print Date 4/24/2017

Page Number 1 of 2

Order From :
ESSENTRA COMPONENTS
P.O. BOX 9900 T-9915
POSTAL STATION A
TORONTO, ONTARIO M5M 2J2
CANADA

VC-ESS001

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone

Ship To Contact

Ship To Phone

Ship Via: FedEx Economy collect

Ship Acct:

Buyer

Customer POID

Customer Tax #

Terms

Currency

FOB

Chantal Lavoie

10127-2607

Net 30

CAD

Destination-Collect

E-MAILED
APR 24 2017

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
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1	BLBS-020	Pip Pin	4/28/2017 Yes 4/28/2017		5.00 Each	\$25.46	\$127.30
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Line Total: \$127.30

2	KBP-504 AS PER DWG D3801 REV. B B160148	Hand Retractable Spring Plunger DAS 38 9-89	4/28/2017 Yes 4/28/2017		10.00 Each	\$24.46	\$244.60
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Line Total: \$244.60

Note:

4/24/2017



Essentra Components
2538 Speers Road, Unit 7
Oakville, ON L6L 5K9
Phone: 905-825-0134
Fax: 905-825-2919
www.essentracomponents.com

Packing List
LOAD NUMBER 655782
SID/INV 1619703
CUSTOMER PO PO36044
ORDER NUMBER 2356590
CARRIER Fed Ex Ground
SHIP DATE 04/26/17
FOB DESCRIPTION COL

SOLD TO 422854
DART AEROSPACE LTD
1270 ABERDEEN STREET
HAWKESBURY, ON K6A 1K7
CANADA

DELIVERY TO 422854
DART AEROSPACE LTD
1270 ABERDEEN STREET
HAWKESBURY, ON K6A 1K7
CANADA

LINE NO	PART NO. DESCRIPTION	ORIGINAL QUANTITY	QUANTITY SHIPPED	CTNS	NET WEIGHT	TOTAL WEIGHT
1	BLBS-020A 1/4 X 1-1/2 SS BL PIN BUTTON HANDLE Cust Order #: PO36044 Country Of Origin: US	5.000	5.000	5	.23	1.23
2	KBP-504 3/8-24 NON-LOCKING SS PULL INDEXING PLUNGER Cust Order #: PO36044 Country Of Origin: DE	10.000	10.000	10	.47	1.47

DAS
38
9-88

SPH 4-27

Certificate of Compliance

This is to certify that the above material shipped against your purchase order is in conformance with all known requirements, specifications and drawings in effect at the time of manufacture. All applicable physical, functional, dimensional and material test reports are on file at our facility, and may be inspected by your representative upon request.

Richard Queer
Quality Assurance Manager